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<th>Docket Number:</th>
<th>16-OIR-06</th>
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<tr>
<td>Project Title:</td>
<td>Senate Bill 350 Disadvantaged Community Advisory Group</td>
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<td>Document Title:</td>
<td>Item 4 - Presentation on Senate Bill 100 Joint Agency Report</td>
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<tr>
<td>Description:</td>
<td>By Aleecia Gutierrez</td>
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<td>Filer:</td>
<td>Kristy Chew</td>
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<td>Organization:</td>
<td>California Energy Commission</td>
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<td>Submitter Role:</td>
<td>Commission Staff</td>
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SB100 Joint Agency Report

Aleecia Gutierrez
California Energy Commission
January 23, 2020
It is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045.
Joint Agency Report

In consultation with CA balancing authorities, through a public process, issue a joint agency report by January 1, 2021 and at least every four years after that includes:

- Technical review of the policy
- Potential benefits and impacts on system/local reliability
- Nature of anticipated financial cost and benefits to utilities
- Barriers and benefits of achieving the policy
- Alternative scenarios to achieve the policy
Joint Agency Report Goals

- Meet report statutory requirements
- Provide direction to the electricity market
- Coordinate planning processes of the State Agencies
- Form consensus on interpretation of statute
Key Considerations

- Reliability
- Resource Diversity & Flexibility
- Energy Equity
- Innovation & Emerging Technologies
- Environmental Impacts
- Affordability
SB 100 Analysis

**Quantitative**

- Modeling of **statewide resource scenarios** to meet targets
- Evaluation framework for **costs, benefits and impacts**

**Qualitative**

- **Technology trends & projections**
- **System benefits**: reliability, resilience, health & safety
- **Energy equity & affordability**
- **Environmental implications, public safety and land use**
- Interactions with **other sectors**
SB100 Comments to date

- **Diverse portfolio** of resources; mix of in-state and regional resources and **energy storage**
- Specific technologies such as **large hydro, small modular nuclear, hydrogen, and bioenergy resources**
- Incorporate **resilience planning** and address wildfire risk, such as microgrids
- Continue to address **reliability**
- Critical importance of **affordability and energy equity**
- **Address air pollution**, particularly in disadvantaged communities

“Don’t be prescriptive”

“Maximize optionality”

“Be technology inclusive”
Option 1: “RPS+”

- Eligible resources types
  - Current Renewables Portfolio Standard (RPS)-eligible resource types
  - Large hydroelectric
  - Nuclear generation
  - Natural gas generation with CCS where GHG emissions=0

- Aligns with current RPS resource types and additional generation types that count as zero fossil emissions under the State’s greenhouse gas inventory
Option 2: “No Combustion”

• Same as Option 1 except would not allow for resources that combust fuel

• Examples of resources not allowed under this scenario
  • Biomass or biomethane combustion
  • Natural gas-fired generation with CCS where GHGs=0
  • Natural gas combusted at a (currently) RPS-eligible resource (e.g., solar-thermal facilities)

• Examples of resources allowed under this scenario
  • Biomethane reformation
  • Natural gas reformation with CCS where GHGs=0
Timeline

Kickoff Workshop
Sacramento

Fall 2019

3 Regional Scoping Workshops
Fresno, Redding, Diamond Bar

Winter 2020

Modeling Inputs & Assumptions
Sacramento Tentatively planned for Feb 24, 2020

Spring 2020

Technical Workshop
San Francisco

Draft Modeling Results Workshop
TBD

Summer 2020

Fall 2020

Report due to legislature

Jan 1, 2021

Draft Report Workshop
TBD

Report due to legislature
SB 100 Engagement

• SB 100 Modeling Inputs & Assumptions Workshop, planned for February 24, 2020 at CEC

• Submit comments to CEC Docket 19-SB-100

• Visit the SB 100 Joint Agency Report webpage: https://www.energy.ca.gov/sb100
Questions/Discussion

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